



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,761	01/14/2004	Ernie R. Silva	019937.0521	4242

29053 7590 07/11/2005

DALLAS OFFICE OF FULBRIGHT & JAWORSKI L.L.P.  
2200 ROSS AVENUE  
SUITE 2800  
DALLAS, TX 75201-2784

EXAMINER

PARKER, FREDERICK JOHN

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/757,761

Applicant(s)

SILVA ET AL.

Examiner

Frederick J. Parker

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

#### ***Specification***

The amendments in response to the Objections to the Specification of the Previous Office Action are acknowledged and appreciated, and the Examiner withdraws the objections.

#### ***Claim Rejections - 35 USC § 112***

The amendments in response to the 35 USC 112 rejections of the Previous Office Action are acknowledged and appreciated, and the Examiner withdraws the rejections.

1. Claims 1-11,13-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for surfactant coating of a tool constructed of a composite material, does not reasonably provide enablement for surfactant coating of a tool of any material or construction. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to carry out the invention commensurate in scope with these claims. Figure 2 and page 9 explicitly require the surfactant solution coating to be applied to tool 100 if it “is constructed of composite material”. Conversely, figure 2 does not include surfactant coating other tools.

#### ***Claim Rejections - 35 USC § 103***

The amendments in response to the 35 USC 102 and 103 rejections of the Previous Office Action are acknowledged; the Examiner accordingly withdraws the rejections and replaces them with the new rejections, as follows, as necessitated by amendment.

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 1762

1. Claims 1,2,8,11,13,14,20,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor in view of Chen et al US 5709949 and further in view of Fukui et al US 4673712.

Molitor teaches forming multi-piece/ multi-component (e.g. composite) golf balls on a stainless steel (= metal) molding process, in which the mold (= tool) is coated to provide easy release of products and providing a long useful life. The mold coating comprises 1) cleaning mold surfaces; 2) tape masking peripheral land portions e.g. 113,115; 3) applying a primer coat; 4) applying release coat/s of FEP fluorocarbon polymer; and 5) curing, to form a coated mold for making composite gold balls. Solvent cleaning and pretreating the mold (tool) with a surfactant coating are not taught.

Fukui teaches the use of a mold coating, which reduces critical surface tension (by definition, a “surfactant”) and prevents sticking of subsequently contacting solid being formed. Metal molds are cited. While drying is not stated, it is apparent the coating must be dry to carry out its function, a wet coating resulting in penetration or reaction into the article being molded and therefore not carrying out the intended function. Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the metal surface cleaning required by Molitor and incorporating the surface tension (surfactant) coatings of Fukui to prevent sticking of material to the metal mold.

2. Claims 9,10,12,21,22,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor in view of Fukui et al US 4673712 and further in view of Chen et al US 5709949.

Molitor and Fukui et al are cited for the same reasons previously discussed, which are incorporated herein. Solvent cleaning is not taught.

Art Unit: 1762

Chen et al teaches forming cured fluorocarbon release layers on metal to produce fuser rollers. It teaches on col. 8, 22-25 to clean the metal surfaces prior to coating with any commercial cleaner (encompassing detergents which include surfactants) or solvent, e.g. isopropyl alcohol, to remove dust, oil, and grease to enhance adhesion of subsequently applied coatings, e.g. primer or fluoropolymer coatings. Although Chen is directed to metal fuser rollers rather than metal molds, the substrate and subsequent coatings are nonetheless similar to that of Molitor, and cleaning is conventional in the art to enhance coating adhesion, so the skilled artisan would have understood that whether the metal substrate to be cleaned is for forming fuser rolls or a golf ball mold is irrelevant because the end goal of forming cleaned surfaces for improved coating adhesion would still occur. Fukui teaches the use of a mold coating, which reduces critical surface tension (by definition, a “surfactant”) and prevents sticking of subsequently contacting solid being formed. Metal molds are cited. While drying is not stated, it is apparent the coating must be dry to carry out its function, a wet coating resulting in penetration or reaction into the article being molded and therefore not carrying out the intended function. Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the metal surface cleaning required by Molitor and Fukui using the cleaners or solvents of Chen et al to provide cleaner surfaces to improve coating adhesion.

3. Claims 4,6,7,16,18,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor in view of Fukui et al US 4673712 and further in view of Chen et al US 5709949 and further in view of Dutheil et al US 5891515.

Art Unit: 1762

Molitor, Chen, and Fukui are cited for the same reasons previously discussed, which are incorporated herein. Powder primers are not taught.

Dutheil et al teaches coating metal substrates comprising the steps of applying a primer powder layer by electrostatic spraying or other conventional techniques, heating, and then applying a polymer powder coating. Since both references teach coating cleaned metal surfaces with a primer followed by a polymer coating/s, it is the Examiner's position that it would have been obvious to incorporate the powder primer and use of powder coatings of Dutheil et al in place of the analogous liquid coatings of Molitor to eliminate the problems associated with liquid coatings, e.g. VOC's, regulatory and health issues, and the ability to recycle powder waste., thereby improving process cost efficiency.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Molitor in view of Fukui and Chen by incorporating powder primer and fluoropolymer coatings in view of the teachings of Dutheil et al in place of the liquid coatings to provide improved coat efficiency and reduce regulatory and health issues.

4. Claims 5,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor in view of Fukui et al US 4673712 and further in view of Chen et al US 5709949 and further in view of Parthasarathy US 4104416.

Molitor, Chen and Fukui are cited for the same reasons previously discussed, which are incorporated herein. A nylon powder primer layer is not taught.

Parthasarathy teaches electrostatic powder coating metal substrates, in which a first fluorinated organic polymer OR nylon-based primer coat is applied, followed by a second layer of the same.

Art Unit: 1762

Since Molitor teaches a primer coat followed by a fluoropolymer to form a release coat, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Molitor in view of Fukui and Chen by substituting the nylon powder primer materials of Parthasarathy which are applied electrostatically to cleaned metal substrates to provide release coatings with improved coat efficiency and reduce regulatory and health issues.

5. Claims 3,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor in view of Fukui et al US 4673712 and further in view of Chen et al US 5709949 and further in view of Niskanen et al US 5342812.

Molitor, Chen, and Fukui are cited for the same reasons previously discussed, which are incorporated herein. A composite mold is not cited.

Niskanen teaches molding golf equipment, including the use of composite molds having inorganic fiber and metal or ceramic filler materials. Although golf balls not explicitly cited, since the molds form golf clubs parts, and both club parts and golf balls are composite materials formed by similar molding processes, it is the Examiner's position that the secondary reference would have reasonably suggested the use of composite molds for forming golf balls because of the expectation of a successful outcome, absent a clear and convincing showing to the contrary.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the method of Molitor in view of Fukui and Chen using a composite mold as disclosed by Niskanen et al because of the expectation of successfully forming golf balls in a composite mold.

***Response to Arguments***

The Examiner has fully considered Applicants amendments and arguments.

Applicants argue the newly added limitation of “applying a surfactant solution....to form a surfactant coated surface” distinguishes over the prior art. The Examiner respectfully disagrees. The limitation is taught by Fukui et al and is incorporated into the rejections above, including the expressed motivation to use such coatings to prevent sticking of material to the mold/ tool.

Applicants argue the rejection of claims 9,10,12,21,22,24 because the references do not teach nor suggest all the claim limitations, without further explanation or reasoning. Thus such arguments are not persuasive. Further arguments that the rejections of previous paragraphs 10-12 do not teach nor suggest the new claim limitation previously cited is not persuasive because (1) the new rejections cited by the Examiner render the new limitation obvious, and hence further response to this point is moot and (2) the tertiary references were never intended to deal with this limitation as clearly understood by the rejections.

As to Applicants assertion that the rejections of claims 3 and 15 do not provide “proper motivation for combining the rejections”, Applicants fail to provide any reasoning or explanation as to why the composite mold would NOT form the golf balls. Applicants simply arguing the rejection without providing substantiation does not overcome the Examiner’s reasoning as set forth in a logical and straight-forward manner: polymeric golf balls are formed in molds by Molitor, Niskanen teaches molding polymeric golf equipment (encompassing golf balls) in composite molds, and therefore there is a reasonable expectation of successfully forming golf balls in such composite molds used for making golf equipment. Hence Applicants’ argument the Examiner’s reasoning is “circular” is simply baseless and non-persuasive.



Art Unit: 1762

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frederick I. Parker  
Primary Examiner  
Art Unit 1762

fjp